The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1.   A method for finding at least one best fare for a trip, the method comprising

determining a set of partial fare solutions for the trip;

adding trip information to the partial fare solutions in order to define a set of complete fare solutions for the trip;

as trip information is added to the partial fare solutions, eliminating partial fare solutions that are non-optimal partial solutions; and

returning a subset of said complete fare solutions as the best fares for the trip.

2.   The method of claim 1, wherein adding trip information comprises:

supplying a fare query to a root node in a solution tree;

assigning fare components corresponding to said root node to a plurality of first nodes;

assigning at least one carrier corresponding to said first nodes to a plurality of second nodes;

assigning at least one flight corresponding to said second nodes to a plurality of third nodes;

assigning at least one priceable unit corresponding to said third nodes to a plurality of fourth nodes; and

assigning at least one fare corresponding to said fourth nodes to a plurality of leaf nodes.

3.   The method of claim 1, wherein said subset of complete fare solutions is a predetermined number of lowest cost fare solutions.

4.   The method of claim 1, wherein said subset of complete fare solutions is an exhaustive set of said complete fare solutions.

5.   The method of claim 1, wherein adding trip information and eliminating partial fare solutions are performed in a recursive manner.

6.   The method of claim 1, wherein adding trip information and eliminating partial fare solutions are performed in an iterative manner.

7.   The method of claim 1, wherein said partial fare solutions are eliminated based on a threshold cost.

8.   The method of claim 1, wherein said partial fare solutions are eliminated based on a refined lower bound.

9.   The method of claim 1, wherein said partial fare solutions are stored in a priority queue.

10.   The method of claim 1, wherein said complete fare solutions are retrieved from a priority queue.

11.   The method of claim 1, wherein adding trip information and eliminating partial fare solutions are performed as part of a branch-and-bound best fare search routine.

12.   The method of claim 1, wherein adding trip information and eliminating partial fare solutions are performed both backward and forward from a destination and origin.

13.   A computer readable medium containing computer executable instructions for finding at least one best fare for a trip, comprising
        determining a set of partial fare solutions for the trip;
        adding trip information to the partial fare solutions in order to define a set of complete fare solutions for the trip;
        as trip information is added to the partial fare solutions, eliminating partial fare solutions that are non-optimal partial solutions; and
        returning a subset of said complete fare solutions as the best fares for the trip.

14.   The computer readable medium of claim 13, wherein adding trip information comprises:
        supplying a fare query to a root node in a solution tree;
        assigning fare components corresponding to said root node to a plurality of first nodes;
        assigning at least one carrier corresponding to said first nodes to a plurality of second nodes;

assigning at least one flight corresponding to said second nodes to a plurality of third nodes;

assigning at least one priceable unit corresponding to said third nodes to a plurality of fourth nodes; and

assigning at least one fare corresponding to said fourth nodes to a plurality of leaf nodes.

15.   The computer readable medium of claim 13, wherein said subset of complete fare solutions is a predetermined number of lowest cost fare solutions.

16.   The computer readable medium of claim 13, wherein said subset of complete fare solutions is an exhaustive set of said complete fare solutions.

17.   The computer readable medium of claim 13, wherein adding trip information and eliminating partial fare solutions are performed in a recursive manner.

18.   The computer readable medium of claim 13, wherein adding trip information and eliminating partial fare solutions are performed in an iterative manner.

19.   The computer readable medium of claim 13, wherein said partial fare solutions are eliminated based on a threshold cost.

20.   The computer readable medium of claim 13, wherein said partial fare solutions are eliminated based on a refined lower bound.

21.   The computer readable medium of claim 13, wherein said partial fare solutions are stored in a priority queue.

22.   The computer readable medium of claim 13, wherein said complete fare solutions are retrieved from a priority queue.

23.   The computer readable medium of claim 13, wherein adding trip information and eliminating partial fare solutions are performed as part of a branch-and-bound best fare search routine.

24. The computer readable medium of claim 13, wherein adding trip information and eliminating partial fare solutions are performed both backward and forward from a destination and origin.

25. An apparatus for finding at least one best fare for a trip, the apparatus operative to:

determine a set of partial fare solutions for the trip;

add trip information to the partial fare solutions in order to define a set of complete fare solutions for the trip;

as trip information is added to the partial fare solutions, eliminate partial fare solutions that are non-optimal partial solutions; and

return a subset of said complete fare solutions as the best fares for the trip.

26. The apparatus of claim 25, wherein adding trip information comprises:

supplying a fare query to a root node in a solution tree;

assigning fare components corresponding to said root node to a plurality of first nodes;

assigning at least one carrier corresponding to said first nodes to a plurality of second nodes;

assigning at least one flight corresponding to said second nodes to a plurality of third nodes;

assigning at least one priceable unit corresponding to said third nodes to a plurality of fourth nodes; and

assigning at least one fare corresponding to said fourth nodes to a plurality of leaf nodes.

27. The apparatus of claim 25, wherein said subset of complete fare solutions is a predetermined number of lowest cost fare solutions.

28. The apparatus of claim 25, wherein said subset of complete fare solutions is an exhaustive set of said complete fare solutions.

29. The apparatus of claim 25, wherein adding trip information and eliminating partial fare solutions are performed in a recursive manner.

30.   The apparatus of claim 25, wherein adding trip information and eliminating partial fare solutions are performed in an iterative manner.

31.   The apparatus of claim 25, wherein said partial fare solutions are eliminated based on a threshold cost.

32.   The apparatus of claim 25, wherein said partial fare solutions are eliminated based on a refined lower bound.

33.   The apparatus of claim 25, wherein said partial fare solutions are stored in a priority queue.

34.   The apparatus of claim 25, wherein said complete fare solutions are retrieved from a priority queue.

35.   The apparatus of claim 25, wherein adding trip information and eliminating partial fare solutions are performed as part of a branch-and-bound best fare search routine.

36.   The apparatus of claim 25, wherein adding trip information and eliminating partial fare solutions are performed both backward and forward from a destination and origin.